

Name\_\_\_\_\_

## Chemistry I: Ionic Lewis Dot II

Period\_\_\_\_\_ Date\_\_\_\_\_

We need to show the transfer of electrons and the resulting cations and anions. The charge brought by the cations and the charge brought by the anions must equal zero (0).

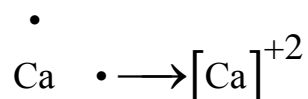
So, math wise the equation looks like this:

$$(\# \text{ cations})(\text{cation charge}) + (\# \text{ anions})(\text{anion charge}) = 0$$

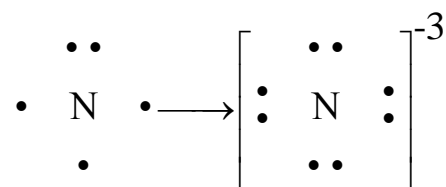
Example:  $\text{Ca}^{+2}$  and  $\text{N}^{-3}$  So:  $x(+2) + y(-3) = 0$  solving the equation

$3(+2) + 2(-3) = 0$  means that 3 Ca ions and 2 nitride ions are needed to make a neutral unit cell.

Step #1



Step #2



Step #3

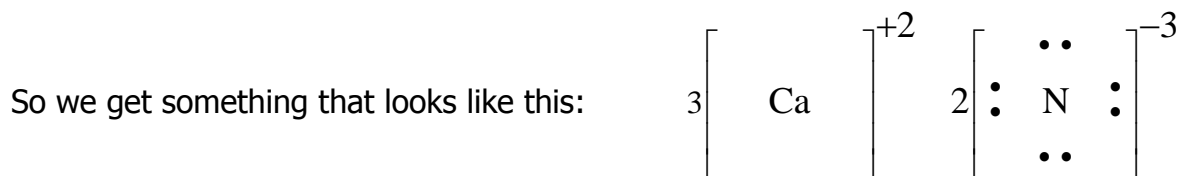


Diagram the 3 steps that show the formation of the following ionic compounds

(1) sodium +sulfur

(2) calcium + sulfur

(3) lithium + phosphorous

(4) strontium + iodine

(5) Calcium + Chlorine

(6) aluminum + oxygen

(7) barium + fluoride

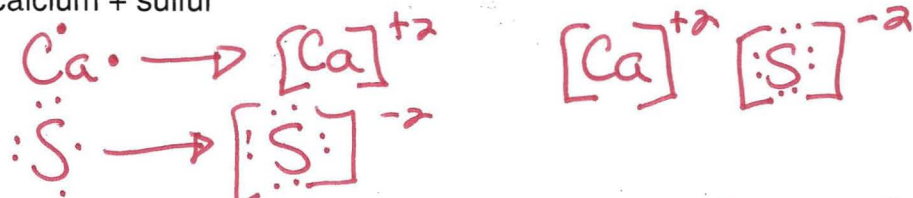
(8) zinc + oxygen

Diagram the 3 steps that show the formation of the following ionic compounds

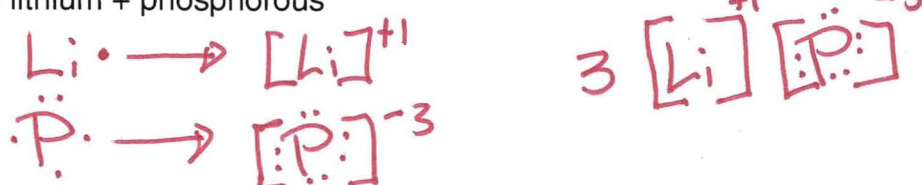
(1) sodium + sulfur



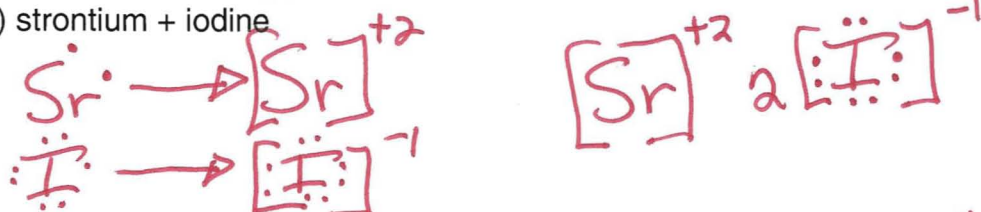
(2) calcium + sulfur



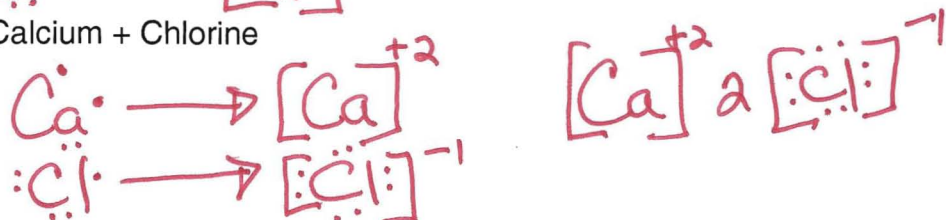
(3) lithium + phosphorous



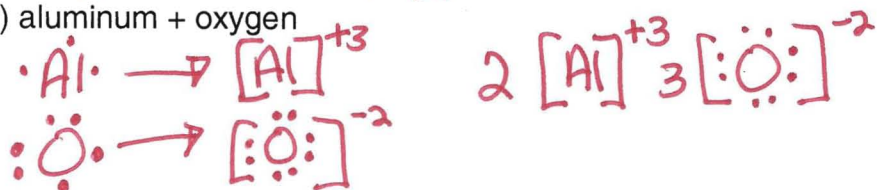
(4) strontium + iodine



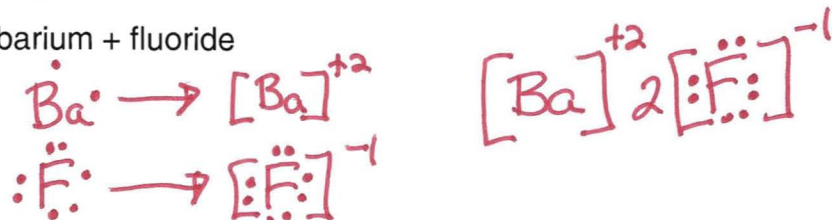
(5) Calcium + Chlorine



(6) aluminum + oxygen



(7) barium + fluoride



(8) zinc + oxygen

